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ABSTRACT

This report discusses factors affecting California's ability to compete for and keep quality teachers. It describes the qualifications of California's current teacher workforce and how they are compensated and discusses research and informed opinions on the influence of money and other factors on teachers' employment decisions. The report discusses measuring teacher quality in different ways; evaluating teacher subject matter knowledge; the competitiveness of teacher salaries; national salary comparisons (which present conflicting data); making comparisons among occupations; teacher salaries in California vary by district size, urbanization, and region; a vast assortment of benefits complete the compensation picture; making ends meet on a teacher's salary in California; conclusions from these comparisons (e.g., California teacher salaries are supplemented by a relatively generous benefit package, and less qualified teachers are concentrated in certain areas); whether money matters; Connecticut's experiences endorses the value of raising salaries; differential pay may address the teacher distribution issue; pay for performance (a controversial option); salary options, which have mixed potential for affecting educational quality; other factors affecting teacher employment decisions (e.g., beginning teacher support and working conditions); and what attracts quality teachers. (SM)

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Teacher Pay in California: Is it Fair? Is it Competitive? Is it Enough?

Linda Hertert

2002

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REPORT

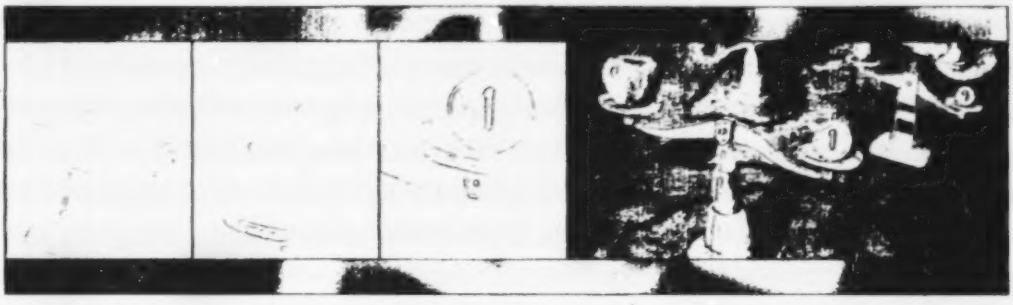
April 2002

EdSource

Clarifying Complex Education Issues

Teacher Pay in California:

Is it Fair? Is it Competitive? Is it Enough?



California's ability to educate its children depends largely on the quality of its classroom teachers. Developing and maintaining a high-quality labor force is a challenge for any organization. Salary, benefits, and working conditions all affect an employer's ability to attract and keep the most qualified, productive, and effective employees. This is true for both the public and private sector.

With approximately 6 million children enrolled in its public schools, recruiting and retaining the best possible teachers in California is a subject of high and abiding interest. Given a teacher workforce of more than 300,000 statewide, it is also a challenge of mammoth proportions.

This report discusses the factors that affect California's ability to compete for and keep these teachers in the classroom. It describes the qualifications of California's current teacher workforce and how they are compensated, and it discusses research and informed opinions on the influence of money and other factors on teachers' employment decisions.

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Teacher quality can be measured in several ways

As a group, California's teachers are formally trained, state-certified professionals. In the 2000–2001 school year, 86% of the state's classroom teachers were fully credentialed. While the requirements have changed somewhat over the last few years, in general that means that they:

- ✔ Hold at least a bachelor's degree;
- ✔ Have demonstrated their knowledge by passing the California Basic Educational Skills Test (CBEST) and satisfying subject matter requirements through coursework or evaluation; and
- ✔ Have completed schooling or training that includes classroom practice, such as student teaching, as well as classwork in various state-required areas, such as reading instruction and the use of technology. (This can be included in a four-year bachelor's degree program, constitute a fifth year of schooling, or be completed concurrent with employment through an internship program.)

The majority of California's teachers are also quite experienced, having spent on average 13 years in the classroom. A substantial portion, about 15% of the work force, is newly employed—no more than two years on the job. This is not a surprising statistic for a state with an unrelenting growth in student enrollment that keeps many districts in a perpetual hiring mode.

Among these new teachers, however, a majority are in classrooms without having completed the education-specific training noted above—51% in the 2000–2001 school year, according to a study commissioned by the Center for the Future of Teaching and Learning (CFTL) and conducted by SRI International. Of this group of noncertified first-year teachers, six out of 10 held emergency permits, one of 10 was teaching under a credential waiver, and three of 10 held an intern or pre-intern certificate as part of a university or school district internship program. These are alarmingly high percentages to those who view certification as a necessary indicator of quality. (See the box on page 3 for definitions of these certifications.)

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Evaluating subject-matter knowledge is more difficult

Further, state certification does not ensure that teachers have any preparation in the subject they actually teach. One of the great scandals of teaching, according to Diane Ravitch, a senior fellow at the Brookings Institution, "is that huge numbers of teachers are teaching subjects in which they have neither a college major nor a minor." Citing research from the National Center for Educational Statistics (NCES), Ravitch writes that nationally "fully 39.5 percent of those whose main teaching assignment is science have neither a major nor minor in science; 34 percent of mathematics teachers are 'out of field,' as are 25 percent of English teachers and 55 percent of history teachers."

Is this the case in California? Yes, according to two recent reports, although California's percentages are below the national averages cited by Ravitch.

According to the California Commission on Teacher Credentialing (CTC), 2.5% of the certificated employees teaching between 1995–1999 were misassigned (the placement of a certificated employee in a teaching or service position for which the employee does not hold the legally recognized certificate, credential, permit, or waiver). When elementary school personnel were excluded—less than 1% of these teachers were misassigned—the rate of misassignments rose to 5.7%. Of the total misassignments, 43% were in the academic subject areas of English, mathematics, the sciences, and social science.

An additional 12,593 assignments were made under Education Code options that permit teachers with specific coursework credits to teach outside their basic credential authorization. Of these assignments, 74% were made in English, mathematics, the sciences, and social science.

Each year, county superintendents of schools are legally required to report to the CTC all teacher assignments in one quarter of the school districts within their county. The CTC then compiles these submissions and reports countywide data to the legisla-

Quality teaching is not easily defined

There is little debate and a lot of evidence to support the popular notion that in a labor-intensive enterprise such as public education, teachers make a difference. The controversy, instead, is over which specific teacher characteristics matter most.

Research in this area generally focuses on three teacher characteristics: education, subject matter expertise, and experience. The results of this research are often confusing, contradictory, and almost always controversial. There is some consistency, however, in the findings that verbal ability, subject matter knowledge, and, up to a point, experience are relatively good predictors of quality teaching—usually defined as a measure of student performance on standardized tests.

There is, however, debate on whether "teacher quality" can or should be judged by the performance of students, and without proven, quantifiable measures, the term "quality teaching" becomes subjective and relative. In common parlance, the term is generally understood to refer to teachers who are especially good at what they do—however that may be defined. But it can also refer to their education and preparation.

State certification is often considered a "minimum standard" of quality. The assumption is that a fully-certified teacher has mastered the pedagogical and subject-matter content, apprenticed in the classroom, and passed the evaluations necessary to "quality" teaching. In this sense, "quality" and "qualified" are synonymous.

Experience is a characteristic that also is often included in definitions of quality teaching. Although the research indicates that the effect of experience on student performance diminishes dramatically after about five years of teaching, the common wisdom is that the longer people do something the better they get. As unsatisfactory as state certification and experience may be as definitions of quality, they are easily understood and quantifiable terms widely referred to for this purpose. For these reasons, they are used in this report as indicators of quality unless specifically noted otherwise.

ture at the end of each four-year cycle. The CTC's figures are not comparable to the national averages mentioned earlier—the CTC reports *the percent of total misassignments* by subject area, while NCES calculated *the percent of teachers* by subject area who were teaching out of their field.

The Public Policy Institute of California (PPIC), however, has calculated statistics comparable to the NCES numbers using data from the California Basic Education Data System (CBEDS). According to their analysis, approximately 20% of teachers in grades 9–12 did not have a subject authorization for the core subject they taught in the fall of 1997. For those teaching English, 16.3% did not have the appropriate authorization, for math 18.3%, for science 14.6%, and for social science 18.5%. Further, PPIC found that the higher a school's percentage of poor, nonwhite students, the higher the percentage of faculty members teaching outside their authorized subject area.

The PPIC's data do not distinguish between those teaching without authorization and those teaching under the various Education Code options, which require at least some coursework in the subject being taught. Still, these also are alarmingly high percentages and illustrate that certification alone may not guarantee students are being taught by fully-qualified teachers.

Teacher qualifications and experience vary by region, district, and school

State averages also mask the uneven distribution of qualified educators across the state. For example, one-quarter of the state's school districts employed fully credentialed teachers exclusively. Conversely, in one out of every six California school districts, 20% or more of the teaching staff did not hold full state certification.

Teacher qualification problems are worst in Los Angeles

These figures vary by geographic region. School districts in the Los Angeles area were staffed on average with the highest percentage of teachers with emergency permits or waivers—21%, according to analyses of data from the 2000–01 school year done independently by CFTL and EdSource. These districts also served the largest percentage of

There are six types of teaching credentials in California

To teach regularly in a public school classroom in California, an individual must hold one of the following certifications. With the exception of the Credential Waiver, all of them require, at minimum, possession of a bachelor's degree, verification of basic skills by passing the California Basic Educational Skills Test (CBEST), coursework in the subject assigned, and clearance through the U.S. Department of Justice or FBI. Detailed credential information is available at: www.ctc.ca.gov

Professional Teaching Credential: Issued to individuals who have successfully completed a teacher preparation program including student teaching. Candidates must meet additional requirements to obtain a "clear" credential. *86% of California teachers in the 2000–01 school year.**

Emergency Permit: Requested by an employer on behalf of an individual when the employer is unable to locate enough fully-credentialed teachers to meet its needs. Permits are issued for one year and may be renewed for a maximum of five years. Individuals must complete specific requirements during the year in order to renew their permit. Permits authorize the holder to provide the same services as a full teaching credential. *11.5% of California teachers in the 2000–01 school year.*

Credential Waiver: Requested by an employer on behalf of an individual when the employer is unable to find credentialed teachers or individuals who qualify for an emergency permit. Waivers are generally issued for one calendar year, and the individual on the waiver must demonstrate progress toward a credential by completing an examination or coursework before the employer may request a subsequent waiver. *1.1% of California teachers in the 2000–01 school year.*

University Internship Credential: Issued to individuals who are enrolled in an accredited internship program administered by a California college or university in partnership with local school districts. These one- to two-year internships are designed to provide classroom experience while the intern completes coursework required for a preliminary or professional clear credential. The intern is authorized to teach under supervision in the area or subject listed on the credential. *1.4% of California teachers in the 2000–01 school year.*

District Internship Certificate: Issued for two years to individuals who are enrolled in an authorized, district-administered internship program. During the internship, the individual is required to complete requirements as specified in their professional development plan. At the end of the two years, the district's governing board can recommend to the CTC that the district intern be granted a professional clear teaching credential. *0.7% of California teachers in the 2000–01 school year.*

Pre-Intern Certificate: Issued to emergency teachers to provide them with intensive preparation in classroom management, subject matter, and basic instruction methodologies. It is only available to participants in an approved pre-internship program conducted by a school district, county office of education, or consortium. The employer must provide frequent and consistent support from an experienced educator. Certificates are valid for one year and can be renewed for one year. The certificate authorizes the holder to provide the same services as with a full teaching credential. *1.7% of California teachers in the 2000–01 school year.*

*Percentages total to more than 100% because some teachers hold more than one type of credential.

Data: Descriptions from the California Commission on Teacher Credentialing and statistics from the Educational Demographics Unit, California Department of Education

Figure 1

Teacher qualifications vary dramatically in California's 10 largest school districts

District	Enrollment	% beginning teachers	% of teachers NOT fully credentialed	% of students eligible for free/ reduced meals
Los Angeles Unified	721,346	19.0	28.0	74
San Diego City Unified	141,804	28.6	1.0	47
Long Beach Unified	93,694	18.0	27.7	68
Fresno Unified	79,007	9.0	5.6	73
Santa Ana Unified	60,643	17.0	20.4	70
San Francisco Unified	59,979	24.9	5.6	41
Oakland Unified	54,863	15.6	26.0	54
Sacramento City Unified	52,734	7.4	.7	63
San Bernardino City Unified	52,031	19.3	19.4	75
San Juan Unified	50,266	9.4	2.6	29

Data: Dataquest, California Department of Education (January 2002) EdSource 4/02

poor students—61%—of any region in the state. And while the San Francisco Bay Area served the lowest percentage of poor students—30%—it was one of three regions in which 11% of teachers worked under emergency permits or waivers. This was the second-highest incidence in the state, although substantially better than in the Los Angeles area.

Comparing types of communities, the problem was most severe in urban areas. The highest concentrations of non-certificated teachers were in the districts that serve the state's largest cities. An average of 16% of district faculties in these cities held emergency permits or waivers, as compared with 12.5% statewide. These big-city school districts also served, by far, the largest percentages of poor students—on average 64% of their students qualified for free or reduced lunches. The next highest concentration of poor students—46%—attended schools in the state's smaller urban areas. As Figure 1 shows, however, California's largest districts, most of which are urban, differ dramatically in this regard.

School districts in California's towns and rural areas served a large percentage of poor students—on average 44% of their enrollments. These students, however, were more likely to be taught by a credentialed teacher than were their counterparts in other areas of the state. Only 8% of the teachers in these areas held emergency permits or waivers.

Southern California districts also have larger proportions of new teachers

When it comes to teacher experience, EdSource's analysis reveals similar patterns of uneven distribution. Regionally, districts in the southern part of the state tended to have larger percentages of new teachers than those farther north. Districts in Los Angeles and Imperial/San Diego areas had the highest percentage—18%—of any area in the state. The percentage for the San Francisco Bay Area—15%— matched the state average. The lowest percentages of new teachers—under 10%—were found in districts in and around Alpine and Humboldt counties.

Looking at the data another way, new teachers were also concentrated in the more urban areas—19% on average versus 12% for districts in the state's towns and rural communities. Also, on average, the largest districts in the state had the highest concentrations of new teachers—19%—while in districts enrolling fewer than 5,000 students, 12% of the teachers were new to the job.

These statistics, however, should be viewed with caution. For example, Figure 1 demonstrates the variations behind the averages. Also, the proportion of new teachers a district employs may reflect its growth rate or proportion of retiring teachers rather than any comparative inability to retain qualified staff.

Big variations exist within districts

The uneven distribution of qualified and veteran teachers across regions and districts also exists *across schools*. That is, *within* a given district, schools with higher percentages of disadvantaged students tend to have less experienced and less qualified teachers. For example, according to a recent California study conducted by the Class Size Reduction Research Consortium, 79% of K–3 teachers are fully credentialed in schools serving the highest percentages of low-income students. This compares to about 96% in schools serving the fewest low-income students.

A study recently conducted by PPIC found similar patterns. According to PPIC, urban schools have the largest share of teachers who are not fully certified—about two to four times that of suburban schools, depending on the

grade level of the school. Urban high schools have lower percentages of teachers qualified to teach in their subject area than do suburban or rural schools. Rural schools tend to have a slightly larger share of uncertified teachers than do suburban schools. Elementary schools, regardless of location, employ on average a much larger share of inexperienced teachers than do middle and high schools.

California needs to keep as many of its qualified, experienced teachers as possible because the demand for teachers is not expected to decrease in the near future. While it is difficult to predict with precision the number of additional teachers needed over the next decade, CFTL estimates that 195,000 teachers will be required to accommodate enrollment growth and to replace teachers who either retire or otherwise choose to leave the profession. If demand continues to outpace supply, it is expected that the percentage of unprepared teachers will increase over the next decade. This is a disturbing trend given that many consider qualified, experienced teachers essential to an effective educational system.

Are teachers' salaries competitive?

Based on the above information, California needs to increase the supply of qualified teachers, and to find ways to attract and keep these teachers in schools serving the state's most disadvantaged students. Some believe one important strategy for doing this is to raise teachers' salaries to more competitive levels. The question arises, of course, competitive with whom? One benchmark could be teachers in other states; another could be people in other occupations with similar knowledge and skills.

Then there is the problem of how to create meaningful comparisons. Should they be adjusted for cost-of-living differences across geographical areas? Should comparisons be limited strictly to salaries, ignoring employer-paid benefits? Do they need to be adjusted to reflect differences in the number of workdays per year? Even when these questions have been addressed, comparisons are ultimately limited by the quality and availability of data.

National salary comparisons present conflicting data

To look at the relative competitiveness of teacher salaries, many observers rely on state-to-state comparisons. Data for such comparisons are available from several sources. Unfortunately, they do not lead to unequivocal conclusions regarding how well or poorly teachers are compensated in California.

Figure 2

National data compare California's average teacher salaries with teachers nationwide and other careers

Teachers*	California	United States
Kindergarten, except Special Education	$43,860	$40,230
Elementary School, except Special Education	$46,720	$41,980
Middle School, except Special Education and Vocational Education	$47,350	$41,890
Secondary, except Special Education and Vocational Education	$50,200	$43,030
*Includes teachers in public and private schools		
Comparable Occupations	**California**	**United States**
Child, Family & School Social Workers	$36,150	$33,530
Preschool & Child Care Center/ Program Educational Administrators	$42,360	$36,330
Editors	$47,430	$44,350
Social Community Service Managers	$47,650	$42,550
Librarians	$48,600	$42,730
Public Relations Specialists	$50,280	$43,700
Chemists	$50,690	$54,280
Accountants & Auditors	$52,040	$48,090
Historians	$54,840	$42,120
Registered Nurses	$56,140	$46,410
Mathematicians	$74,980	$67,770

Data: Bureau of Labor Statistics California and National Salary Comparisons, 2000 (www.bls.gov, March 2002) EdSource 4/02

One source of comparable national salary data is the Bureau of Labor Statistics (BLS) *Occupational Employment and Wage Estimates* compiled annually from survey data collected from employers across the country. Figure 2 lists the BLS estimates of *unadjusted* average salaries for public and private school teachers employed in 2000. Teachers' salaries are listed by teacher assignment—the BLS does not report a composite salary for all teachers. For California, the BLS estimated average salaries from a low of $43,860 for kindergarten teachers to a high of $50,200 for high school teachers, all higher than the national average. According to these data, California teachers were well paid in comparison to most of their counterparts across the country.

The problem is that the BLS data, or any *unadjusted* salary data, do not reflect the effect that differences in the cost of living across the

Caveat #1

Cost-of-living indexes are statistical formulations designed for specific comparisons

The price of goods and services varies by geographical area. For example, generally large metropolitan areas are "more expensive" than rural areas. It follows then that a dollar spent in a less expensive area will buy more than a dollar spent for the same items in a more expensive area. In terms of "buying power," the two dollars are not equal.

This notion of the variability of costs is the theoretical basis for cost-of-living indexes. Indexes are the result of sophisticated statistical formulations that combine the costs of a "basket" of goods and services for different areas at one point in time. The result of these calculations is a series of numbers, or indexes, for each geographical sub-unit, such as for states within a country or cities within a state. These indexes are "standardized" so that "100" represents the average for an entire geographical area. The index for each sub-unit is then used to adjust some dollar value—usually a measure of income—to reflect the relative differences in the "buying power" of these dollars compared with the average.

For example, the AFT's interstate cost-of-living index contains indexes for each state. According to AFT calculations, California has an index of 122.7. This means the goods and services included in the index cost on average 22.7% more in California than in the country as a whole. Using this index, the average teacher's salary in California reported by the AFT as $47,680 has the "buying power" of $38,845 ($47,680 divided by the index, 1.22744). Similarly, Oregon's average teacher salary of $45,103 has the "buying power" of $47,652 because that state's index of 94.651 is below the national average of 100, increasing the "buying power" of each dollar earned in Oregon relative to the national average.

It follows then that any number adjusted for cost-of-living differences is only as "good" as the index used to make the adjustment. Not all indexes are created equal. They vary according to the "basket" of goods and services included, the time period in which the numbers were collected, and the geographical area from which the prices were collected.

More importantly, cost-of-living indexes, including AFT's, are designed for specific comparisons. For example, the AFT index measures *interstate* differences in the cost of goods and services *relative to the national average*. As such, it is correctly used to adjust average state dollars—the differences in average incomes between, say, California and New York. It does not account for differences *within* a state, nor should it automatically lead to a conclusion that all salaries in a state are too high or too low.

states have on the "purchasing power" of salaries. (See box above.) In other words, *unadjusted* salary data do not account for the fact that on average a $40,000 salary does not go as far in California as it does in, say, Oregon.

The importance of using *adjusted* dollars when making these comparisons across geographical areas is illustrated by estimates from another source of national salary data. In its most recent annual publication, *Survey & Analysis of Teacher Salary Trends*, the American Federation of Teachers (AFT) reports the national average teacher salary for the 1999–2000 school year at $41,820. California's *unadjusted* average was estimated at $47,680, listed as the eighth highest in the nation. However, according to the AFT's cost-of-living index, California is the third most expensive state in the country after Hawaii and Alaska. When the AFT adjusted teachers' salaries using their index, California's teacher salary rank plummeted to 32nd with an *adjusted* annual salary of $38,845.

Education Week provides another source of national salary data in their 2000 edition of *Quality Counts*. Using federal census data from 1992–1999, they calculated average salaries for teachers (including public and private school teachers) with *only* a bachelor's degree at $30,074 nationally, for teachers with a master's degree at $40,703, and for all teachers with *at least* a bachelor's degree at $35,048. They then estimated the adjusted salaries for California's teachers at $30,332, $37,274, and $32,930, respectively.

As the above figures demonstrate, salary data can be very confusing and authoritative sources often differ significantly in their estimates. In this case, one reason for these differences is that the estimates are calculated from equally valid but different sources—the BLS uses surveys of employers, *Education Week* uses U.S. Census data, and AFT uses their survey of state departments of education. Each also covers slightly different but overlapping periods of time, and reports on different groups of teachers.

When comparing salaries across geographical areas, however, a more important task than establishing the precise salary figure is to evaluate the salaries in light of the relative differences in the cost of living that exist across these areas. The usefulness of any comparison based on unadjusted numbers is limited, and conclusions based on such comparisons without reference to these limitations should be viewed with caution. The conclusion based on the adjusted salary comparisons presented here is that teacher salaries in California are generally lower than the national averages by as much as 8.4%.

Comparisons among occupations provide another approach

For comparisons across occupations, the BLS and *Education Week* data are again some of the best available sources. The BLS data includes *unadjusted* salary information for occupations that are arguably comparable to teaching. Figure 2 includes BLS data for a sample of

occupations that have educational prerequisites, responsibilities, and authority similar to those typical of public school teaching. Or they are jobs for which teachers with certain subject-matter specialties might qualify. The choice of comparisons is ultimately, of course, subjective and in this example not intended to be comprehensive. However, based on those selected, California's teachers earned less on average than did those working in the same state in almost every occupational category.

Of the 11 non-teaching occupations included here, Californians earned more than the national average in every occupational category except one—California chemists earned on average 6.6% below the national average in 2000. Teacher salaries in California, regardless of grade level taught, also exceeded the national average.

Nationally, teacher salaries exceeded the salaries for five out of the eleven non-teaching occupations listed here. In contrast, salaries for California teachers exceeded the estimated salaries for only two non-teaching categories: social workers and administrators of preschool/childcare programs. California's teacher salaries were lower than those listed for the other nine California categories with the exception of the state's high school teachers, whose average salary exceeded those of social community service managers, librarians, and editors.

According to data reported by *Education Week*, teacher salaries nationally lag behind those of similarly educated non-teachers. As reported in *Quality Counts 2000*, teachers across the country with only a bachelor's degree earned less on average over the years 1992–1999 than did their non-teaching counterparts—$30,074 versus non-teachers at $43,075. Teachers with a master's degree also lagged behind non-teachers holding the same degree—$40,703 versus $63,483.

The same pattern held for California. Teachers in this state with only a bachelor's degree earned on average 23.54% less than non-teachers with the same degree—$30,332 adjusted versus $39,673 adjusted for non-teachers. The difference was even more dramatic for those holding master's degrees. California teachers earned on average 35.45% less than non-teachers—$37,274 adjusted versus $57,740 adjusted for non-teachers with master's degrees.

The market value of college degrees certainly varies by area of specialization, the institution that awards them, and the ratio of supply and demand at any given point in time or place. Still, teacher salaries in California consistently lag behind those of people with similar educational preparation and/or occupations. That consistency justifies further study of the cause and the possible effects these differences make in public education's ability to compete in California's labor market.

Caveat #2

Units of measure matter

Salary comparisons are made most often using "annual" incomes. For example, the BLS data cited in this report lists the "average annual" salary for middle school teachers in California at $47,350 and for registered nurses in the state at $56,140. Nurses earn more *per year* than middle school teachers.

Nurses take home more dollars in a year than do middle school teachers, but what is not mentioned is that nurses have to work more days to earn their additional income. In California, a teacher's regular work year is approximately 185 days—180 school days and perhaps five additional days devoted to professional development or some other district-required activity. Nurses, like most other professionals, typically work five days a week, 52 weeks a year, or 260 days.

According to the *Employee Benefits Survey* compiled by the BLS, the average number of paid holidays per year is 9.3 for employees working in medium to large organizations in the private sector. Also according to the BLS, the average number of paid vacation days for employees with 10 years of service in these organizations is 16.9. (Ten years of service is used as the best comparison to the average seniority of California teachers, which EdSource computed as 13 years.)

Adjusting for holidays and vacations, then, nurses work 233.8 days per year for an average annual salary of $56,140. They earn $240 *per workday* ($56,140 divided by 233.8 days) while middle school teachers earn $256 *per workday* ($47,350 divided by 185 days). When salaries are calculated by workdays, middle school teachers in California earn on average more than registered nurses.

Certainly these averages mask many individual variations in work schedule and pay rate. But comparing teachers' annual salaries with those in other professions may not be appropriate without some accommodation for the differences in days worked per year.

A new study published by the U.S. Department of Education provides another perspective on teacher salaries. Using BLS data from 1972–1997, researcher Dan Goldhaber found that the differences between average teacher salaries and average salaries in other occupations has changed over time: the difference grew larger in the 1970s, but teachers regained most of those losses in the 1980s and early 1990s, only to have the differences increase again in the late 1990s. The long stretch of relative increases in teacher salaries through the 1980s and much of the 1990s, however, masks an increasing gap between the starting salaries of teachers and those in entry-level, professional positions in other fields. In absolute terms, starting salaries in teaching lagged further behind those in other occupations in the

Caveat #3

Averages can be misleading

Teachers across the country are generally paid according to a uniform salary schedule established at the district level. This means that within each district, teachers with the same level of education and years of experience are paid the same salary. For example, all teachers with a bachelor's degree and one year of teaching experience receive the same amount. Similarly, all teachers with a master's degree and 20 years experience earn the same amount.

With a uniform salary schedule, two different districts can have identical salary schedules—paying teachers the same amount at each education/experience step on the schedule—and have very different *average salaries*. For example, if District A has a disproportionately higher number of new teachers than does District B, the *average salary* paid by District A will be *lower* than that paid by District B, all other factors being equal.

Based on *average salaries*, Districts A and B appear to offer different salaries when, in fact, they have the same salary schedule. The difference is not what they pay, but whom they employ. In this case, salary ranges (the lowest and highest salary paid) provide a better picture of what teachers earn.

The range, however, has its drawbacks. First, the range—two numbers—is not as easy to use in comparisons as an average—one number. More importantly, though, if either the highest or lowest number in a dataset is an extreme case—unusually high or unusually low—the range is not a representative measure of that dataset. For this reason, unusual cases at either end of the range are noted and discussed in this report wherever possible.

1990s than in the 1970s. As Goldhaber writes, "...it is clear, that, for some white-collar occupations, what a new graduate can expect to make in teaching is substantially less than what that individual would make in other fields."

To the degree that salary, especially starting salary, influences career choices, the comparisons discussed here suggest that public education in California is at a competitive disadvantage. California legislators perhaps recognized this in 2000 when they voted (Senate Bill 1643) to provide state funds to encourage local districts to raise the beginning salary of their credentialed teachers to $34,000 annually.

Teacher salaries in California vary by district size, urbanization, and region

The best source of data for comparing teacher salaries within the state is the California Department of Education (CDE). Each year, school districts voluntarily submit salary and benefit information to the CDE. It is then compiled and made available to the public on the department's website.

According to EdSource's analysis of these data, California teachers beginning their careers in the 2000–01 school year earned $33,193 on average. The most experienced teachers—those at the top of their district's pay scale—earned an average of $63,484. These figures include districts in Alameda County that report their salary data and benefits together, inflating the averages slightly. As with other state averages, these statistics mask the degree of variation that exists within the state. For example:

Across the state...

- ✔ Starting salaries ranged from a low of $20,227 to a high of $49,720. Over 15% of the districts paid less than $30,000, while only 16 districts offered new teachers more than $40,000. Five of those districts were in Alameda County, so their salary figures include benefits.
- ✔ Salaries for the most experienced and educated teachers ranged from a low of $32,000 to a high of $86,572. Only five districts paid their most experienced teachers less than $40,000, and these were very small districts, the largest of which enrolled only 61 students. The small Santa Clara County district paying $86,572 was one of only eight districts in the state offering $80,000 or more.

By district size...

- ✔ Districts enrolling more than 50,000 students paid the highest starting salaries on average—$35,693.
- ✔ Districts enrolling fewer than 5,000 students paid the lowest starting salaries—$32,523 on average.
- ✔ The lowest starting salary in a small district was $20,277 while the lowest offered by one of the state's 10 largest school districts was $33,650.

By urbanization...

- ✔ Districts in the state's largest cities offered higher starting salaries—$35,192—and higher maximum salaries to veteran teachers—$69,589—than did districts in less populated areas.
- ✔ Districts in the state's least populated areas offered the lowest starting and maximum salaries—$31,838 and $57,340, respectively.

By geographic region...

- ✔ Districts in Los Angeles County offered the highest salaries on average for new and veteran teachers—$35,305 and $71,082, respectively.
- ✔ Districts in the northernmost counties of California offered the lowest salaries on average for new and veteran teachers—$31,033 and $53,344, respectively.

- ✔ Districts in the San Francisco Bay Area offered $34,580 on average to new teachers, with starting salaries ranging from $24,263 to $45,709. The most experienced teachers in this region earned an average of $66,108, with top salaries ranging from $44,252 to $86,572.

In general, teachers working in the state's largest school districts and the state's largest cities, particularly in Los Angeles, earned the highest salaries. Teacher salaries vary from district to district for various reasons, including differences in district revenues, the ratio of teacher supply to demand, local cost of living, and prevailing economic conditions. The skill of the local collective bargaining agent and the power of the local union are also influential.

A vast assortment of benefits complete the compensation picture

Employee compensation generally includes more than salaries. Employers pay for a vast assortment of employee benefits, including paid vacations, holidays, training and education programs, sick leave, health care, life insurance, and retirement plans.

Although employer-paid benefits do not directly affect employee incomes, they represent a substantial savings for the employee. For this reason, employers offering benefits, even if they pay relatively low salaries, are attractive to potential and existing employees. This is especially true for employees with seniority because many benefits, such as retirement plans, become more valuable over time.

Benefit packages vary from employer to employer. This discussion focuses on two of the most expensive benefits—health care insurance and retirement plans. The best source of information on employee benefits nationally is the BLS. According to their data, participation in health care plans is greater in the public sector than in the private sector. In 1998, an average of 86% of white-collar employees (including teachers) working in the public sector were enrolled in some form of health plan through their employer as opposed to only 68% of professional employees in the private sector. Participation, however, varied dramatically by organizational size—from 41% for private-sector businesses with fewer than 49 workers to 71% for companies with more than 2,500 employees.

The BLS does not provide benefit information by state. And there is no source of information on benefits by occupation, making comparisons between, for example, teachers and nurses impossible. California school districts, however, do voluntarily submit information on health care benefits to the CDE (Form J-90). School Services of California compiled the data used here from the 828 school districts (of the state's 985) reporting information for the 2000–01 school year. According to these data, all but two of the districts in the state paid part or all of the health insurance and retirement plan costs for their employees. On average, districts paid $5,755 per FTE (full-time equivalent) employee for health benefits, totaling $1.7 billion or 91% of the total cost of these plans. Teachers paid the remaining 9%.

Small, rural districts and those in the northernmost counties of California tended to pay the most per FTE for medical coverage. Employer contributions ranged from a low of $4,907 on average in the San Francisco Bay Area to a high of $6,937 on average in districts in Shasta, Tehama, and Glenn counties. Teachers in high-paying districts did not necessarily receive more or better benefits; districts with fewer employees often pay proportionately more for the same coverage offered by larger districts.

Regarding retirement benefits, the BLS data show that on average 98% of public employees (including teachers) were enrolled in some form of retirement plan in 1998. This compares to an average of 69% of professional employees working in the private sector—rising to 81% in large companies.

In California, teachers have access to one of the largest and most successful pension plans in the country, with more than $88 billion in assets (as of December 2001) and a consistent record of double-digit returns for the past six years. Members of the California State Teachers' Retirement System (CalSTRS) contribute 8% of their earnings each year, for which they receive a lifetime monthly allowance based on age, years of service, and average final compensation at the time of retirement. The sum of contributions made during employment has no bearing on the retirement allowance. In fact, according to CalSTRS, "retired members usually receive benefits equal to their accrued contributions and interest within the first three years of retirement."

Given the limits of the data, it is impossible to make any comparisons between the total compensation received by California teachers and their professional counterparts in other occupations. The available data do, however, indicate that California's teachers receive a generous supplement to their salaries—as much as 15% of their salaries on average for health coverage alone. The value of this supplement should not be overlooked when evaluating California's ability to compete for and keep quality teachers.

Making ends meet on a teacher's salary in California

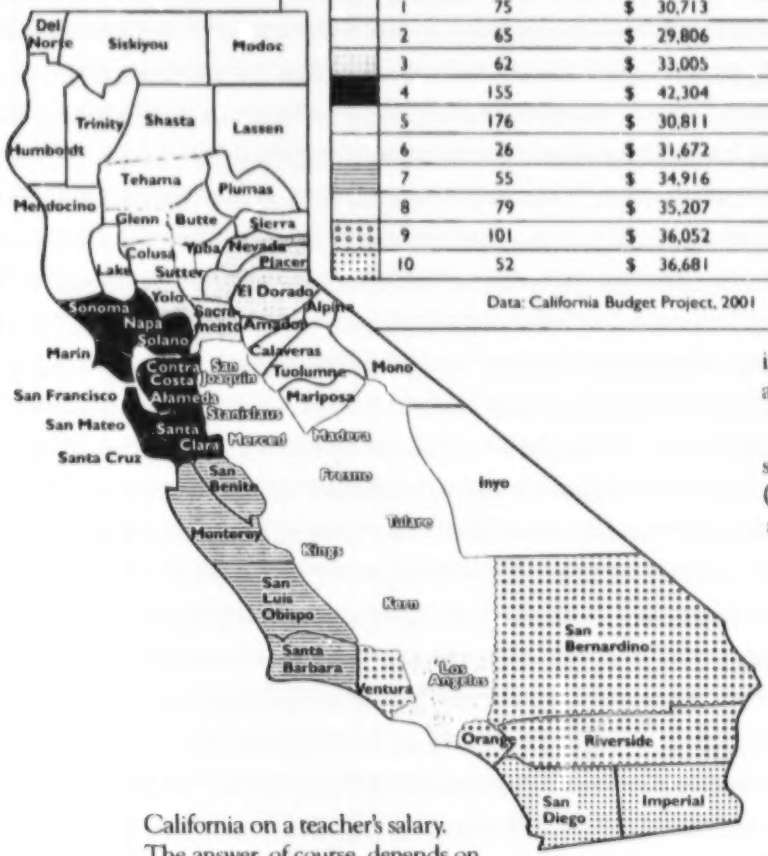
Another way to evaluate teacher salaries is to ask whether a person can maintain an acceptable standard of living in

Figure 3

Regional comparisons of living costs and teacher salaries vary widely

Region	School Districts	Annual Living Expenses	Average Beginning Teacher Salary	Average Ending Teacher Salary
1	75	$ 30,713	$ 31,033	$ 53,344
2	65	$ 29,806	$ 32,526	$ 57,123
3	62	$ 33,005	$ 32,512	$ 61,172
4	155	$ 42,304	$ 34,580	$ 66,108
5	176	$ 30,811	$ 32,439	$ 60,379
6	26	$ 31,672	$ 31,188	$ 59,066
7	55	$ 34,916	$ 33,072	$ 64,332
8	79	$ 35,207	$ 35,305	$ 71,082
9	101	$ 36,052	$ 34,025	$ 70,420
10	52	$ 36,681	$ 32,652	$ 67,668

Data: California Budget Project, 2001 EdSource 4/02



California on a teacher's salary. The answer, of course, depends on whether a teacher is just starting a career or is in the peak earning years, on how many people the teacher supports, and on where that teacher lives.

Data compiled by the California Budget Project (CBP) are useful in attempting to answer this question. The CBP divided the state into 10 regions (see Figure 3), estimating monthly and annual living expenses necessary to support a "modest standard of living" for various family configurations statewide and for each region. For example, statewide a two-parent family of four with one employed parent needed an annual income of $36,245 in 2000 to pay for basic living expenses, such as housing (based on rental costs), utilities, transportation, food, health care, and taxes. In the San Francisco Bay Area, the same family needed $42,304 annually.

The CBP estimates include annual expenditures for health care—averaging statewide 13.8% of the total budget for the family configuration used here. As many teachers in California have all or most of their health care expenditures paid for by their employer, the annual income requirements discussed here are overstated by as much as 14% for teachers receiving these benefits.

Using the CBP data, EdSource compared average salaries for the newest and most experienced teachers (the bottom and top of the salary schedule) with the annual living expenses for a two-parent/one-working-parent family. The purpose of the analysis was to add another perspective to the discussion of teachers' salaries in California, not to suggest that the CBP estimates are anything more than general reference points.

According to the analysis, the average annual salary for the most experienced teachers exceeded the required annual income by at least $22,631 annually in all regions. The situation was very different for families whose sole wage earner is a beginning teacher. The average salary for new teachers exceeded the estimated annual expenses in only four regions—1, 2, 5, and 8—and then by a relatively small amount. In every region a substantial percentage of districts reported starting salaries below the CBP's estimated expenses. These ranged from a low of 17% of the districts in Region 2 to highs of 95% of the districts in the greater San Francisco Bay Area (Region 4) and 96% of the districts in the Imperial/San Diego area (Region 10).

Cost-of-living estimates should vary—as do the CBP's—across a geographical area as large and diverse as California. It seems reasonable that salaries would reflect these regional differences in some systematic way. This, however, is not the case with teachers' salaries. For example, the range of salaries for beginning teachers varies from a low of 18.3% *below* the CBP's estimated annual expenses for the San Francisco Bay Area to a high of 9.13% *above* the annual expenses for districts in and around Butte, Shasta, and Tehama counties (Region 2). Salaries for the most experienced teachers vary even more widely—from a low of 56.27% *above*

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the annual expenses estimated for the San Francisco Bay Area to a high of 101.9% *above* the CBP's estimates for the Los Angeles area.

It is also reasonable to expect that teacher shortages would be greater in those areas paying less than the estimated cost of living—if one assumes that shortages are primarily due to low salaries. This, too, is not the case. Higher salaries—relative to the region's cost of living estimate—tend to be paid by districts in areas with higher teacher shortages. For example, the Los Angeles area at 21% has the highest percentage of teachers working with emergency permits or waivers—one measure of teacher shortages. Districts in Los Angeles pay beginning teachers slightly more than the area's estimated cost of living and, as noted above, pay their most experienced teachers the highest percentage over estimated expenses.

Conversely, lower salaries—relative to the CBP's estimates—are found in areas with lower teacher shortages. In the San Francisco Bay Area, 11% of teachers hold emergency permits or waivers, which is below the state average of 12.5%. The average beginning salary, however, is 18.26% below the estimated living expenses in the area—the largest percent below for any region—and the average salary at the top of the pay scale is 56.27% above the estimated cost of living for the area—the lowest percentage for any region.

Assuming that CBP's estimates are substantially correct, neither teacher shortages nor salary levels are likely the result of the local cost of living. Similarly, high salaries correlate more strongly with teacher shortages than with high living costs.

For experienced teachers, the CBP estimates indicate that salaries are more than sufficient to maintain a modest standard of living with money left over. For beginning teachers, it may be more of a struggle. If a beginning teacher, however, is not a family's sole wage earner and has medical costs paid by the employer, that teacher's salary is probably sufficient to meet the basic requirements estimated by the CBP for most areas—more so if the teacher chooses to work for a district struggling to find and keep qualified teachers.

Comparisons, though complex, point to some conclusions

A variety of comparisons have been presented here in an attempt to describe California's current teacher workforce and to evaluate the competitiveness of teacher compensation in the state. Comparisons are complex, often resulting in less than definitive conclusions. Still, even with the limited sample of comparisons presented in this report, certain conclusions seem justified:

- ✔ California on the whole appears to employ a fairly educated and experienced group of public school teachers who earn salaries that potentially can more than double over their professional careers.
- ✔ Teachers' salaries in California are supplemented by a relatively generous benefit package.
- ✔ Less-qualified teachers are concentrated in certain regions, districts, and schools.
- ✔ Salary variations across geographical regions are not completely explained by differences in the cost of living across these areas.
- ✔ Starting salaries for teachers are comparatively low on a variety of measures and in certain areas of the state.
- ✔ California teachers earn less than the national average for teachers when dollars are adjusted, less than the national average for non-teachers with similar educations, and less on average than those working in similar occupations both in the state and across the country.

Does money matter?

Money influences employment decisions. The level and structure of compensation plays an important role in attracting or dissuading individuals from entering and staying in an occupation. This applies to public education. "All else equal, as teachers' salaries and benefits rise relative to those in other professions, teaching becomes a more attractive field and higher ability individuals will enter the profession," concludes Goldhaber in his analysis of teacher compensation for the U.S. Department of Education.

Based on the previous discussion, California's teacher salaries are not competitive on a variety of measures. More importantly, the current level and structure of teacher compensation appears insufficient to ensure that children throughout the state have access to qualified teachers. Is raising all teacher salaries the answer? Is a more targeted approach appropriate? Is money the only way to influence teachers' employment choices, or are there other factors that also affect whether teachers choose to work in certain schools or to stay in the profession? The following addresses these questions.

Connecticut's experience endorses value of raising salaries

The state of Connecticut offers a real-world example of how dramatically raising salaries can help change a state's ability to attract the best and the brightest to the teaching profession.

In 1986, Connecticut lawmakers passed a comprehensive education reform package that more than doubled teacher salaries over the following decade. In the 1999–2000 school year, Connecticut's teachers made, on average, $52,410 unadjusted—the highest average of any state. Along with salary increases came a variety of policies and incentives aimed at raising teacher quality. For example, prospective teachers had to major in an academic subject and maintain a 3.0 average in their major courses. They also had to pass a basic-skills test to gain admittance to a teacher-preparation program and a series of subject-area tests before they could be licensed. Lifetime licenses were eliminated. Teachers were required to renew their licenses every five years through additional coursework and professional development.

Skeptics feared that raising the standards would only increase teacher shortages and jeopardize student learning. The new policies had the opposite effect. Applications to the University of Connecticut's School of Education have tripled since the legislation was enacted. And according to *Education Week*, the grade point average of education majors now ranks higher than those of 10 out of the 11 other schools on campus, including engineering, business, and nursing.

Higher teacher salaries did not eliminate teacher shortages in Connecticut. While the supply of qualified teachers has risen dramatically—less than one percent of the teaching positions were unfilled at the start of the 1999–2000 school year—the state continues to experience shortages, as do most states, in specific subject matter areas such as physics and chemistry. Connecticut also continues to find it difficult to increase the percentage of minority teachers in its classrooms—currently, 93% of the teachers and 70% of the students are white. Still, Connecticut provides an impressive example of how raising teachers' salaries can increase the number of people choosing teaching as a career, even when those higher salaries are tied to tougher academic and professional requirements.

Differential pay may address the teacher distribution issue

Other localities have taken a more targeted approach to address specific teacher shortage issues and raise teacher quality. According to an *Education Week* report: "Some experts believe states should pay extra for teachers in high-demand subjects; those willing to work in hard-to-staff schools or districts; those who graduate from better colleges or post higher test scores; and those who possess greater knowledge and skills or raise student achievement."

There is evidence that this approach works. For example, New York City schools offered a 15% salary increase to teachers agreeing to work in schools that were on the state's academic watch list. As a result of the salary increase, 233 educators transferred into the city's low-performing schools in 1999–2000, including 190 senior teachers.

Differential pay schemes, such as the one used in New York City, avoid some of the problems inherent in statewide approaches. As California's Little Hoover Commission noted in a recent legislative report: "To be effective, attention should be paid to regional labor market differences…increasing teacher pay in schools already staffed by credentialed teachers has little benefit, and could aggravate attempts to lure quality teachers to hard-to-staff schools."

Differential pay is also advocated as a means of reducing shortages in high-demand subject-matter areas, such as math and the sciences. CFTL estimates that while 10% of all high school faculty members in California are working without teaching credentials—one measure of teacher shortages—14% of the faculty members teaching math or physical science courses are non-credentialed. And these percentages do not include the number of credentialed teachers who may be teaching "out-of-field" in these areas.

One explanation for the high percentages of non-certified teachers is that the private sector offers higher salaries for graduates in these fields than does the typical school district. As mentioned earlier, the BLS estimates that the average annual salary for mathematicians working in California is $74,980 versus $50,200 for secondary school teachers. And in his study on teacher compensation, Goldhaber found that "starting salaries in engineering, chemistry, mathematics or statistics, and computer sciences all exceeded teaching by at least $10,000."

Some individuals and groups oppose differential pay schemes. For example, in its *2000–2001 Resolutions*, the National Education Association (NEA) wrote: "The Association opposes providing additional compensation to attract and/or retain education employees in hard-to-recruit positions." In contrast, the AFT is on record as "recognizing the limitations of the single salary system…" and suggesting "a professional teacher compensation system could include financial incentives to teachers…who agree to teach in low-performing and hard-to-staff schools."

The 'single salary schedule' (as described in Caveat #3 on page 8) is one of the many results of the American Progressive Movement—an early 20th century reaction to the graft, corruption, and favoritism that then characterized much of big-city government and the administration of public services. The intent of the Pro-

gressive Movement was to remove politics from public administration and to create a value-free, professional approach to managing public goods and services. As the AFT explains, the single salary schedule is "based almost exclusively on levels of education and years of experience, [and] was designed in response to discriminatory practices and to ensure fairness—no differential pay for gender or race of the teacher or educational level of the students taught."

The single salary schedule, according to the AFT, has persisted in large part "because it is viewed by teachers as equitable and by management as easy to administer." While the AFT is on record as open to certain exceptions to the salary schedule, other professional educators' respect for the single salary approach makes them reluctant to accept any modifications to the current system.

Pay for performance is a controversial option

Others believe that the best way to improve teacher quality—as measured by student learning—and to attract and retain the best teachers is by paying teachers based on some measure of what they know and do.

This approach—referred to in various forms as merit pay, pay-for-performance, or knowledge- and skills-based pay—is grounded in the research base linking student performance to teacher characteristics. Supporters argue that student performance will improve as teachers who cannot perform leave teaching. Further, talented college students will be drawn to and experienced teachers less likely to leave a profession where their potential earnings are constrained only by their individual efforts.

Merit pay systems, popular in the 1980s, typically identified the "best teachers" through some form of peer review and then rewarded these teachers from a fixed pool of funds. Some were tied to measures of student performance and financially rewarded schools, rather than individuals. Newer pay-for-performance and knowledge- and skills-based systems are different. "Such systems reward teachers with base pay increases or bonuses for acquiring and demonstrating specific knowledge and skills needed to meet educational goals," according to Allan Odden, a leading expert and proponent of these systems.

Nationally, a number of school districts, such as Cincinnati, Ohio, have quite recently adopted a form of performance-based pay for their teachers. In this system, teachers move through five career levels—Apprentice, Novice, Career, Advanced, and Accomplished. Each level has a minimum pay level and, excluding the apprentice level, two or three salary increments. Teachers must progress out of the two lowest categories to continue working for the district. Movement through the pay structure is based on evaluations on 17 standards of good teaching. Frequent, in-depth evaluations determine whether teachers advance in the career categories, stay in the same category, or slide back into a lower one.

The district and union (which helped to design the system and ratified it by a 54% to 46% vote in September 2000) have recently voted to extend the implementation of the new system to four years, giving teachers time to practice all 17 teaching standards before undergoing a comprehensive evaluation. Implementation of the salary component of the new system is tentatively scheduled for the 2002–03 school year.

Iowa is currently the only state to replace its seniority-based system with one that pays teachers based on their performance. The new system, initially priced at $40 million, includes mandatory mentoring (mentors are paid) for beginning teachers, increased salaries for beginning teachers (up from $23,000 to $28,000), ongoing professional development, and a compensation system that is structured in four tiers: Beginning, Career, Career II, and Advanced. Teachers will move through the career levels based on comprehensive evaluations yet to be designed. The system is being phased in on a voluntary basis currently and is mandated statewide in 2003. Teachers already employed start at the Career level at their current pay. As the plan exists now, teachers at the Advanced level will earn about $41,500 annually—some of the state's lowest-paying districts now have salary schedules that top out at about $34,000.

Pay-for-performance systems are opposed for a variety of reasons. For example, some contend that the evaluation systems upon which salary advances depend cannot be valid or objective. Others argue that the links between specific teacher skills and knowledge and student achievement are not conclusive enough to justify such dramatic changes. Still others worry that these compensation systems will lead to a narrowing of the curriculum and lessening of creativity as teachers focus only on the skills and knowledge that lead to salary increases.

It is too early to evaluate the effect these systems will have on a locality's relative ability to attract and retain teachers, or on student performance. Still, the growing interest in and implementation of these systems makes them too important an alternative compensation structure to ignore.

Salary options have mixed potential for affecting educational quality

Raising teacher salaries can improve a state's ability to attract college students into teaching, as the Connecti-

cut example demonstrates. Raising salaries across the board by any significant amount, however, is expensive and may exceed the budgetary capabilities of many states. It may also exacerbate any existing salary inequities within the state.

Differential increases targeted to increase the number of teachers with specific expertise and to attract teachers to specific schools is a less expensive approach that has proven successful in a number of places across the country. It remains to be seen if attempts to align salaries with some measure of teacher performance can increase public education's competitiveness in the labor market, or improve student learning. There are factors other than money, however, that also influence employment decisions and are worth considering when discussing how best to improve California's ability to attract and keep qualified teachers.

Many factors besides salary affect teacher employment decisions

Teachers often report that factors such as professional support and working conditions are at least as important as salaries in their professional employment decisions. Both research and informed opinion support this point of view, and shed light on some less-discussed influences on teachers' employment decisions, including school location and student characteristics.

Support for new teachers is vital

Nationally more than 20% of new teachers leave the profession after four years, according to an *Education Week* analysis of U.S. Department of Education data. New teachers who had scored in the top quartile on college-entrance exams were nearly twice as likely to leave the profession (26%) as those who scored lower (14%).

Why did these teachers leave? On-the-job support was an important factor. Teachers who did *not* participate in an induction program were nearly twice as likely to leave teaching (20%) as those who received this form of support and guidance (11%). The available data do not indicate how the attrition rate for new teachers compares with the rate for new employees in other occupations. What is clear, however, is that the attrition rate for new teachers can be reduced when they receive professional support in their first years on the job. Consistent with these findings, California is instituting such induction programs statewide.

Working conditions make a big difference

"Working conditions" is a broad category that includes factors important to both new and veteran teachers. Among other things, the term refers to the general school environment, which reportedly can make a substantial difference in teacher retention. For example:

- ✔ "Schools with the greatest success attracting and keeping high-quality teachers provide healthy, safe, and stimulating teaching environments" *(Little Hoover Commission in a legislative report based on research review and testimony from "Teacher Workforce" hearings)*.
- ✔ Teachers reporting dissatisfaction with student discipline and the school environment were twice as likely to leave teaching (22%) as those who were satisfied (11%) *(Education Week's analysis of U.S. Department of Education data)*.
- ✔ Poor facilities and unsafe working conditions are some of the reasons capable teachers leave hard-to-staff schools…working conditions have a stronger effect on teaching satisfaction than salary *(National Center for Education Statistics' national survey)*.
- ✔ Approximately 57% of science teachers surveyed reported that "school image" is an important factor when deciding where to work *(National Science Teacher Association's national survey)*.

"Working conditions" also include how schools are managed and who teaches there. "Well-administered schools attract teachers…" writes California's Little Hoover Commission. In a recent national poll conducted by Public Agenda (a nonpartisan, nonprofit research group), a majority of teachers said they would choose "schools where administrators give them strong backing" over those that just offered higher salaries. The teachers were willing to "sacrifice higher pay if it meant they could work in schools with well-behaved students, motivated colleagues, and supportive administrators."

Prospective teachers often get their first indication of how a school is managed through the recruitment and hiring process. "If a school's interview and hiring process is bureaucratic and cumbersome, or if the employment decisions are delayed by red-tape and paperwork, the best teachers move on to better schools," reports the Little Hoover Commission.

A CFTL survey of California's teachers and districts indicates that "teachers in the hardest-to-staff districts [are] less likely to feel actively recruited, have an accessible contact person, get accurate and prompt answers, and be notified about next steps in a timely manner."

School location is an often-overlooked variable

In its survey of California teachers, CFTL also found that teachers considered the proximity of the job to their home the most important factor when choosing their current position. School location, a seldom-used variable in research on teacher preferences, was more important to the

teachers surveyed than salary, student characteristics, school philosophy, or support for professional learning.

Texas study indicates student characteristics may influence teacher mobility

In a landmark longitudinal study of Texas teachers between 1993 and 1996, economist Eric Hanushek, *et al.*, analyzed the association between teacher mobility patterns and the relative attractiveness of different districts, as measured by salaries offered and certain student characteristics. Annually, 79% of teachers remained in the same school, 14% left the Texas public school system, 4% changed schools within districts, and 3% switched districts. Job patterns differed sharply by years of service: teachers with two or fewer years of experience were twice as likely to leave public school teaching and four times more likely to switch districts than more experienced teachers (11 to 30 years of service).

The analysis showed the most dramatic difference in teacher mobility patterns was related to student achievement. When teachers changed schools within districts, even in urban areas, they more often than not moved to schools with fewer academically and economically disadvantaged students. More than 25% of teachers in the bottom achievement-quartile schools left each year, compared with less than 20% in schools in the top quartile. Higher average student achievement significantly reduced the probability that a school's teachers, regardless of years of service, would move or leave the teaching profession. The researchers concluded "these differences imply that the lowest achieving students are more likely to have teachers new to the school and to the profession...."

Overall, student achievement was a much more important factor than salary on teachers' decisions to change schools/districts, and it was also the best predictor of leaving the profession. That is, regardless of the salaries they were paid, teachers working in schools with low-performing students were more likely to leave teaching than were teachers working in schools with high-performing students. Salary was more likely to be a reason for switching districts than for leaving the profession—though not as important as student achievement.

While this is a landmark study in terms of its scope and the strength of its findings, it does have limitations. As the authors acknowledge, it was not possible to quantify the extent to which other factors that may influence teachers' employment decisions are associated with schools with higher achieving students. These associative factors may include the level of parental involvement, school resources, the appearance and condition of school facilities, the number of and access to experienced teachers, and the level of administrative support and guidance.

New state policies address teacher issues

Since 1997, California has instituted a wealth of new policies aimed at teacher recruitment, preparation, credentialing, professional development, and compensation. Among the most notable changes are the following:

- ✓ New regional teacher recruitment centers and a website to help teaching candidates get information about the profession.
- ✓ The creation of new standards for teacher preparation, which are currently being instituted.
- ✓ Changes to the state's credentialing requirements to provide alternative paths for becoming fully credentialed.
- ✓ New requirements and induction programs for supporting teachers during their first years in the profession.
- ✓ State incentives to encourage school districts to raise beginning teacher salaries.
- ✓ A variety of financial incentives to encourage teachers to work in the lowest-performing schools.
- ✓ New professional development institutes, run by the University of California and aligned with state academic standards.
- ✓ Bonuses for teachers who earn National Board for Professional Teaching Standards certification.

A detailed listing of the laws passed is available at: www.edsource.org/edu_tea_law.cfm

The information presented here is just a sampling of the information available on factors other than salary that strongly influence where teachers choose to work and their commitment to the profession. Many states, California among them, have responded to the recommendations derived from this body of research with a variety of programs and policies.

What will attract quality teachers?

Attracting and keeping quality teachers is generally agreed to be key to improving California's public school system, but the opinions on how best to do this are nearly unlimited.

Money is an important, if not the most important, factor in competing in any labor market. Research shows that all else being equal, money influences employment decisions. And Connecticut's example illustrates the power of money to influence the career decisions of college students even when requirements and professional standards are raised as well.

The within-state comparisons discussed in this report show an unequal distribution of well-qualified teachers—those with the most preferred characteristics, such as experience, full credentials, and subject-matter expertise—frequently to the detriment of the state's most disadvantaged students. This inequality of access

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to the best teachers is the real story beneath the statewide averages. The challenge facing California is to create a strategy that will attract and keep qualified teachers in the schools that now go begging.

Raising all teacher salaries equally is a strategy with potentially high costs and negative consequences because it would exacerbate the relative salary inequities that currently exist across the state. A more targeted approach could prove more equitable and affordable. If structured correctly, it could move college students into the profession through higher starting salaries, while also moving some veteran teachers into schools now struggling to find qualified teachers. There is evidence that differential pay strategies work. The challenge is to create them in a reasoned and thoughtful way aimed at achieving specific results. And the focus of these efforts should be on the schools children attend and in which teachers work, not on districts, counties, or regions. Money is a powerful motivator, and if policymakers do not consider the unintended consequences of differential pay thoughtfully and in advance, the solution could be worse than the problem.

Attention to teacher salaries is an important component of any statewide strategy to improve the teacher workforce. But teachers themselves say that money alone is not sufficient to keep them in the classroom or even in the profession. New teachers need support and guidance. All teachers want to work in safe, healthy environments within a well-managed school and with effective colleagues. They are even willing to trade income to secure these working conditions—a point policymakers should not overlook. EdSource

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Related EdSource publications

Update on California's Teacher Workforce Issues (3/01)

How California Recruits, Prepares, and Assists New Teachers (4/99)

Strengthening Teacher Quality in California: Defining Consequences, Building Capacity (4/99)

Collective Bargaining: Explaining California's System (3/99)

Additional resources

Enhancing Teacher Quality through Knowledge- and Skills-based Pay. Odden, Allan, *et al.* Consortium for Policy Research in Education (CPRE). RB-34. 215/573-0700, November 2001. Ordering information at: www.cpre.org

Equal Resources, Equal Outcomes? Betts, Julian R., *et al.* Public Policy Institute of California. 2000. Ordering information at 415/291-4400; order or download at: www.ppic.org

How Has Teacher Compensation Changed? Goldhaber, Dan D. "Selected Papers in School Finance, 2000–01." U.S. Department of Education. 2001. Download at: www.ed.gov

Making Ends Meet: How Much Does It Cost to Raise a Family in California? California Budget Project. September 2001. Ordering information at 916/444-0500; or download at: www.cbp.org

Merit Pay, 'Pay-for-Performance,' and Professional Teacher Compensation. American Federation of Teachers. April 2001. View at: www.aft.org/issues/meritpay/meritpay.html

NEA 2000-2001 Resolutions, F-9. Salaries and Other Compensation. National Education Association. 2000. View at: www.nea.org/resolutions

State Occupational Employment and Wage Estimates. Bureau of Labor Statistics, U.S. Department of Labor. 2000. View at: www.bls.gov/oes/2000/oes_nat.htm and www.bls.gov/oes/2000/oes_ca.htm

The Status of the Teaching Profession 2001. Shields, Patrick M., *et al.* The Center for the Future of Teaching and Learning. 2001. Ordering information at 831/427-3628; order or download at: www.cftl.org

Survey & Analysis of Teacher Salary Trends 2000. Nelson, F. Howard, *et al.* American Federation of Teachers, AFL-CIO. 2001. 202/879-4400; download or view detailed data at: www.aft.org/research

Visit EdSource Online at www.edsource.org for a full bibliography related to this publication, more information on teacher quality issues, a summary of related laws and policies, and additional resources and links.

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